

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Final Office Action of July 29, 2003 and the Advisory Action of October 21, 2003 have been received and their contents carefully reviewed.

By the present amendment, Applicant hereby adds new claims 32-42 and respectfully submits no new matter has been entered.

In the Final Office Action of July 29, 2003, the Examiner rejected claims 1-3, 8-12, 17, 18, 23, 24, 27, and 29-31 under 35 U.S.C. § 102(b) as being anticipated by Franklin et al. (European Pat. App. Pub. No. 0 477 882 A2); and rejected claims 4-7, 13-16, 19-22, 25, 26, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Franklin et al. in view of Moseley et al. (U.S. Pat. No. 6,046,849). These rejections are traversed and reconsideration of the claims is respectfully requested in view of the following remarks.

The rejection of claims 1-3, 8-12, 17, 18, 23, 24, 27, and 29-31 under 35 U.S.C. § 102(b) as being anticipated by Franklin et al. is respectfully traversed and reconsideration is requested.

In the Final Office Action of July 29, 2003, the Examiner cites Franklin et al. as teaching “a patterned retarder layer (22) which is formed on a transparent substrate (fig. 3, 62)... ; wherein the transparent substrate is adhered to/on the polarizer (figs. 7 or 8a - the transparent substrate is within the retarder which is adhered to/on the polarizer in these display embodiments)...; and wherein the patterned retarder layer includes a plurality of first area cells (26) for separating light polarization passed through the polarizer and the transparent substrate into a left-eye picture and a plurality of second area cells (24) for separating light polarization passed through the polarizer into a right-eye picture, wherein the plurality of first area cells and the plurality of second area cells are patterned in accordance with the predetermined pattern of

said left-eye and right-eye modulated light (column 2, lines 7-35) and wherein the first and second cell areas are in alternating lines.” (Office Action at 2.)

According to M.P.E.P. § 2131, however, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single reference.

Claim 1 is allowable over Franklin et al. in that claim 1 recites a combination of elements including, at least “a polarizer...; a transparent substrate on the polarizer; and a patterned retarder layer for separating light polarization passes through the polarizer and the transparent substrate...” Franklin et al. fails to teach or suggest, either expressly or inherently, at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 2-10 and 31, which depend from claim 1, are also allowable over Franklin et al.

Claim 11 is allowable over Franklin et al. in that claim 11 recites a combination of elements including, for example “a retarder layer on a transparent substrate..., the retarder layer for polarizing light and modulating polarization from the transparent substrate... wherein said transparent substrate is adhered to the polarizer.” Franklin et al. fails to teach or suggest, either expressly or inherently, at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 12-16, which depend from claim 11, are also allowable over Franklin et al.

Claim 17 is allowable over Franklin et al. in that claim 17 recites a combination of elements including, for example “preparing a ...transparent substrate...; forming a retarder layer on the transparent substrate...; and adhering the transparent substrate to the polarizer.” Franklin et al. fails to teach or suggest, either expressly or inherently, at least these features of the claimed

invention. Accordingly, Applicant respectfully submits that claims 18-22, which depend from claim 17, are also allowable over Franklin et al.

Claim 23 is allowable over Franklin et al. in that claim 23 recites a combination of elements including, for example “a polarizer...; a transparent substrate on the polarizer; and a patterned retarder layer on said polarizer, said retarder layer including a plurality of first areas cells for separating light passed through said polarizer into a left-eye picture and a plurality of second areas cells for separating light passed through said polarizer into a right-eye picture; wherein said plurality of first cells areas and said plurality of second cells areas are patterned in accordance with said predetermined pattern of said left-eye and right-eye modulated light.” Franklin et al. fails to teach or suggest, either expressly or inherently, at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claims 18-22, which depend from claim 17, are also allowable over Franklin et al.

Further, and with respect to the rejection of claims 11 and 17, and their respective dependent claims, Applicant respectfully submits Franklin et al. discloses, with respect to Figure 3, at column 4, lines 36-49

“The preferred embodiment is an attached liquid crystal retarder cell 22 to the front of flat panel 12. ...Figure 3 reveals the construction of a basic [liquid] crystal retarder 22. Retarder 22 is constructed in a sandwich fashion. Transparent electrode (ITO) 52 is a layer on substrate 54. A layer of polyimide 62 is on ITO 52. Similarly, ITO 56 is a layer on substrate 58. A layer of polyimide 60 is on ITO 56. Between layers 60 and 62 is liquid crystal 64 and spacers 66 which maintain a particular distance between parallel layers 60 and 62.”

Accordingly, Franklin et al. teaches wherein the retarder 22 illustrated in Figure 3 is a multi-component system which contains as a constituent part, the layer of polyimide 62. Since

the retarder 22 contains the layer of polyimide 62, Applicant respectfully submits the retarder 22 cannot be formed on the layer of polyimide 62, as asserted by the Examiner.

In the Advisory Action of October 21, 2003, the Examiner asserts that the retarder 22 illustrated in Figure 3 of Franklin et al. can be considered as “on” the layer of polyimide 62 because “in the broadest interpretation of the word ‘on’ something may be within something else and still considered on it (e.g., on the bus).”

Applicant respectfully submits, however, that the language within claims cannot be given the “broadest interpretation.” Accordingly to M.P.E.P. § 2111, “claims must be given their broadest reasonable interpretation consistent with the specification” (emphasis added). Further, the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.

Applicants respectfully submit the word “on” has many different meanings and uses within an immense number of contextual instances of everyday life. For example, the word “on” can be used to indicate position above and supported by or in contact with (e.g., The vase is on the table. We rested on our hands and knees.); to indicate figurative or abstract position (e.g., on the young side, but experienced; on her third beer; stopped on chapter two); to indicate a medicine or other corrective taken or undertaken routinely (e.g., went on a strict diet); to indicate a source of power or energy (e.g., The car runs on methane.); concerning and to the disadvantage of (e.g., We have some evidence on him.); and to indicate a means of conveyance (e.g., ride on a bus).

While many interpretations for the word “on” exist within various contexts, the various contexts, however, are not interchangeable. For example, Applicant respectfully submits one would not, in stating “she was on her third beer,” interpret the word “on” to suggest “she was

‘above and supported by or in contact with’ her third beer.” Such an interpretation of the word “on” would be unreasonable and inconsistent with the context in which the statement “she was on her third beer,” was used. Similarly, Applicant respectfully submits that, in alleging “something may be within something else and still considered on it (e.g., riding on the bus),” the Examiner has interpreted the meaning of the word “on,” as found in the claims, in a manner inconsistent with the specification and with the interpretation that those skilled in the art would reach.

Further, in the Advisory Action of October 21, 2003, the Examiner asserts that the retarder 22 illustrated in Figure 3 can be considered as “on” the layer of polyimide 62 because “the components in fig. 3 [of Franklin et al.] which actually provide the retardance in retarder (22) are the liquid crystal (64) and the transparent electrodes (52 and 56) which are all located directly on transparent substrates (62 or 60).”

Regardless of what items the Examiner has alleged to “actually provide the retardance in retarder (22),” and which are “located directly on transparent substrates (62 or 60)” of Franklin et al., Applicant respectfully submits that the retarder 22 illustrated in Figure 3 of Franklin et al. is a multi-component device which consists of substrates 54 and 58, transparent electrodes 52 and 56, polyimide layers 60 and 62, spacers 66, and liquid crystal 64 (see Franklin et al., column 4, lines 41-48). Accordingly, and assuming *arguendo* that the “the components in fig. 3 [of Franklin et al.] which actually provide the retardance in retarder (22) are the liquid crystal (64) and the transparent electrodes (52 and 56),” Applicant respectfully submits that liquid crystal 64 and the transparent electrodes 52 and 56 are not the retarder 22. Accordingly, Applicant respectfully submits that the retarder 22 is not formed on the polyimide 62 because the polyimide 62 is a part of the retarder 22.

Further, and with respect to the rejection of claims 1 and 23, and their respective dependent claims, Applicant respectfully submits Franklin et al. teaches in reference to Figure 3 and column 4, line 49 - column 5, line 32,

“The maximum retardance of a tunable liquid crystal retarder 22 occurs at zero voltage and is determined by the thickness of the liquid crystal, just as in the determination with solid crystal retarders. A voltage applied to the cell decreases the amount of retardation introduced until a saturation voltage zero retardance is obtained. ...The present embodiment uses a cell designed to have a retardation difference of one-half wave between the “off on” state of the cell. Ideally, this cell will have one-half wave retardation at zero volts and zero retardation at any voltage greater than the saturation voltage. ...The result is two available states of retardation...”

Figure 5 illustrates one way of achieving retardance of appropriate rows 14 and 16 of panel 12. A set of electrodes 30 are superimposed over alternate rows of flat panel 12. ...Electrodes 30 over alternating rows drive these rows with voltage sufficient to provide overall one-quarter wave retardation. Rows 32 without electrodes retain their original three-quarter wave retardation.

An alternate approach, shown in Figure 6, has electrodes over each of the rows of panel 12. Interleaved indium tin oxide (ITO) electrodes 34 and 36 are placed over the rows of panel 12, allowing one voltage to be applied to all odd rows 34 and another voltage applied to even rows 36...”

However, Franklin et al. teaches in reference to Figure 2b and at column 4, lines 4-24,

“Another material, mica, may be used in construction of retarder 22... Mica is a natural crystal that can be used in very thin pieces. Effective quarter wave, three-quarter wave steps may be etched in the mica to appropriate thicknesses. Such mica is bonded to the front of a display panel. ...A cover glass or durable coating can be applied over the mica or other materials for protection.”

Accordingly, Applicants respectfully submit that while the liquid crystal retarder 22 as described with reference to Figures 3-7 of Franklin et al. includes the layer of polyimide 62, the liquid crystal retarder 22 cannot be reasonably interpreted as a patterned retarder, including a

plurality of first area cells (26) and second area cells (24) for variously separating light polarization, as asserted by the Examiner. (see Franklin et al., column 4, line 49 - column 5, line 32)

In the Advisory Action of October 21, 2003, the Examiner appears to abandon the citation at column 2, lines 7-35 of Franklin et al. (the embodiment directed to the solid crystal retarder illustrated in Figures 1-2b) relied upon in the Final Office Action of July 29, 2003 by referring to a newly cited portion of Franklin et al. related to the embodiment directed to the liquid crystal retarder illustrated in Figure 3 of Franklin et al. Specifically, the Examiner states “[a]s described in column 5, lines 27-41 and fig. 6 of [Franklin et al.] does disclose a liquid crystal embodiment with a plurality of first (34) and second (36) area cells which correspond to the plurality of areas (24 and 26) of retarder (22) in fig. 1.”

However, and as described above, the “first (34) and second (36) area cells” shown in Figure 6 of Franklin et al., as cited by the Examiner, are actually interleaved ITO electrodes 34 and 36. Moreover, Franklin et al. teaches at column 2, lines 15-28,

“The light from these alternating lines 14 and 16 pass through retarder 22 which alternates in the form of etched steps 24 and 26 to match the alternating display lines 14 and 16, between one-quarter wave and three-quarter wave phase retardation. The light of lines 14... passes through the quarter wave retarder... notches 24 of waveplate 22 resulting in light that is circularly polarized in the right hand direction. The light from lines 16... passes through the three-quarter wave retarder lines... humps 26 of waveplate 22 resulting in light that is circularly polarized in the left hand direction.”

As such, Applicants respectfully submit that interleaved ITO electrodes 34 and 36 cannot “correspond to the plurality of areas (24 and 26) of retarder (22) in fig. 1,” as asserted by the Examiner, because the interleaved ITO electrodes 34 and 36 cannot alter the polarization

characteristics of light passing through them, from the alternating lines 14 and 16 shown in Figure 1 of Franklin et al., as the “plurality of areas (24 and 26) of retarder (22) in fig. 1” do.

As described above, the retarder shown in Figure 3 consists of a plurality of distinct parts that function together to form a tunable liquid crystal retarder 22 (see Franklin et al., column 4, lines 50-52). Moreover, the fact that one of those distinct parts (e.g., the interleaved ITO electrodes 34 and 36) may be patterned does not reasonably imply that the entire tunable liquid crystal retarder 22 is “patterned.” Applicant respectfully submits that implying an entire multi-component retarder, such as that illustrated in Figure 3 of Franklin et al., is “patterned” simply because a component therein may be patterned would frustrate the generally accepted interpretation of the word “patterned” in a manner consistent with the specification and with an interpretation that those skilled in the art would reach.

Accordingly, Applicant respectfully submits a *prima facie* case of anticipation has not been established with respect to the present invention defined, at least in part by independent claims 1, 11, 17, and 23.

The rejection of claims 4-7, 13-16, 19-22, 25, 26, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Franklin et al. in view of Moseley et al. is respectfully traversed and reconsideration is requested.

Claims 4-7 include all of the elements of claim 1 and claim 28 includes all the elements of claim 23, as discussed above, and Franklin et al. fails to teach or suggest at least the features of the aforementioned independent claims as recited above. Similarly Moseley et al. fails to cure the deficiencies of Franklin et al. Accordingly, Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness regarding claims 4-7 and 28 in view of claims 1 and 23, as above.

Claims 13-16 and 19-22 include all the elements of claims 11 and 17, respectively, as discussed above, and Franklin et al. fails to teach or suggest at least the features of the aforementioned independent claims as recited above. Similarly Moseley et al. fails to cure the deficiencies of Franklin et al. Accordingly, Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness regarding claims 13-16 and 19-22 in view of claims 11 and 17, as above.


Applicant believes the foregoing remarks place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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